Highway Safety Improvement Program (HSIP)

Local Program Symposium

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Safety & Regulations

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Presentation Topics

- The Basics of HSIP
- The HSIP Process
- High Risk Rural Roads (HRRR) Program
- Rail-Highway Crossings Programs

HSIP Program Funding

- **NOT a federal grant program**
- **90% federal HSIP funds available for most projects**
- **10% match required**
  - State pays match for STH projects
  - Locals pay match for local streets and highways
  - Connecting highway may be either state or local match

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HSIP Crash Reduction

- **Must have crash history applicable to proposed treatment – Not Near Misses!**
- Project Evaluation Factor (PEF) is computed by SE Region and estimates crash reduction potential of proposed improvements and compares to the project costs
- PEF crash reduction is estimated using the Crash Modification Factors from CMF Clearinghouse http://www.cmfclearinghouse.org/
- PEF may also be used to rank relative merits of projects

HSIP Project Requirements

- Must follow WisDOT Facilities Development Manual (FDM) for design
- Must follow state letting process
- Any project scope change would require application resubmittal and approval with a new PEF

Program Cycle & Application Deadlines

- Four-year program of projects
- Program on an annual cycle
- Next program is 2016-2019
- Deadline for 2016-2019 Standard HSIP submittals is

  August 15th, 2015

- Deadline for 2016-2019 Mid-Cycle HSIP submittals is

  February 15th, 2016

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Typical Eligible Spot Projects

- Intersection safety improvements
- Straightening isolated curves or hills
- Improving sight distance
- Access modifications
- Constructing turning, bypass or other auxiliary lanes
- Eliminating a roadside obstacle
- Installing guardrails, barriers and crash attenuators
- Installing signs, pavement markings and delineators

Safety Emphasis Areas

- Continued interest in hotspot location treatments

- Increased interest in systemic safety improvements at system or corridor levels
  - Must stem from comprehensive data-driven crash evaluation – PEF may not be required

- Movement toward a mix of systemic and spot low-cost treatments

Typical Local System-Wide Projects

- **Local units of government are encouraged to conduct system-wide crash analyses (e.g., countywide, citywide, corridor-wide) such as identifying hazardous locations and/or run-off-road crashes**
- **Typical projects could include:**
  - Stand-alone guardrail installations and end treatments
  - Spot or corridor signing
  - Pavement marking
  - Rumble strips
  - Eliminating clear zone encroachments
  - Pedestrian countdown timers
  - Corridor signal upgrades

Countdown Pedestrian Signals

- A proposed project must have enough pedestrian crashes at the proposed locations to meet a PEF of 1.0 or greater using a 25% crash reduction
- Projects must apply to Corridors or Geographic Areas as opposed to a single intersection
- Proposals including local and connecting highway intersections must be split into 2 separate applications
- The total of all countdown pedestrian signal projects is limited to $3 million annually

LED Retrofits to Traffic Signals

- Projects must apply to corridors
- All LED retrofit projects will be capped. Maximum total cost of a project is limited to $750,000
- A $1.5 million per year limit is set in the HSIP Program for LED retrofit projects
- Crash history is required for all intersections

Application Form Basics

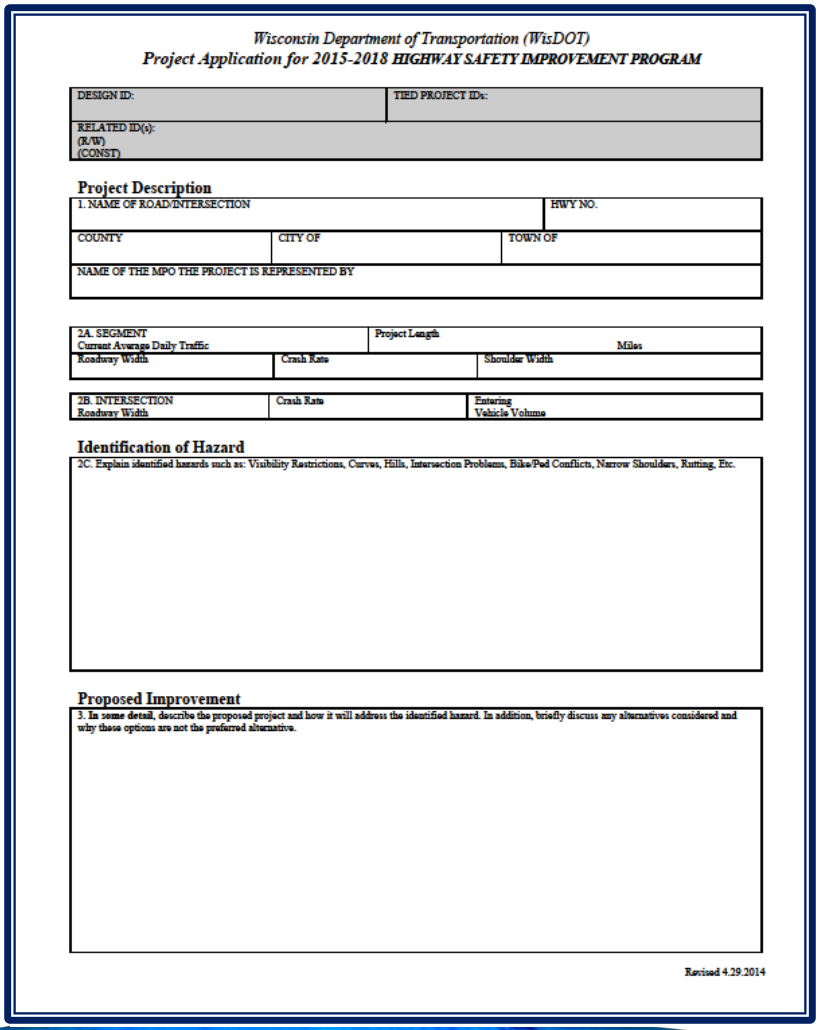
THE FORM

- Located at http://www.dot.wisconsin.gov/localgov/highways/hsip.htm
- Becomes the Concept Definition Report (CDR) for safety projects

THE PURPOSE

- Provides consistent relevant information
- Identifies hazard(s)
- Describes project in some detail
- Explains how project will address hazard(s)
- Facilitates consistent review by HSIP Review Committee
- Results in more informed decision-making

The Application Document



Wisconsin Department of Transportation (WisDOT)
Project Application for 2015-2018 HIGHWAY SAFETY IMPROVEMENT PROGRAM

DESIGN ID:	TIED PROJECT IDs:
RELATED ID(s): (R/W) (CONST)	

Project Description

1. NAME OF ROAD/INTERSECTION		HWY NO.
COUNTY	CITY OF	TOWN OF
NAME OF THE MPO THE PROJECT IS REPRESENTED BY		

2A. SEGMENT Current Average Daily Traffic		Project Length Miles
Roadway Width	Crash Rate	Shoulder Width

2B. INTERSECTION Roadway Width	Crash Rate	Entering Vehicle Volume

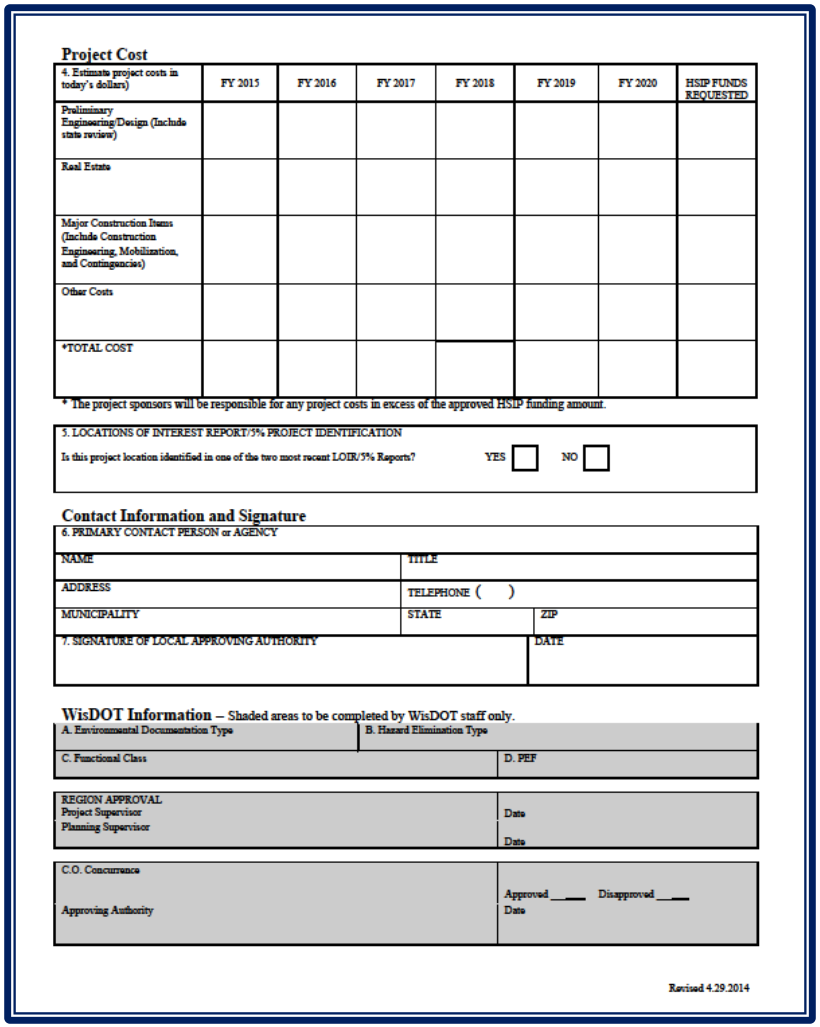
Identification of Hazard

2C. Explain identified hazards such as: Visibility Restrictions, Curves, Hills, Intersection Problems, Bike/Ped Conflicts, Narrow Shoulders, Rutting, Etc.

Proposed Improvement

3. In some detail, describe the proposed project and how it will address the identified hazard. In addition, briefly discuss any alternatives considered and why these options are not the preferred alternative.

Revised 4.29.2014



Project Cost

4. Estimate project costs in today's dollars)	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	HSIP FUNDS REQUESTED
Preliminary Engineering/Design (Include state review)							
Real Estate							
Major Construction Items (Include Construction Engineering, Mobilization, and Contingencies)							
Other Costs							
*TOTAL COST							

* The project sponsors will be responsible for any project costs in excess of the approved HSIP funding amount.

5. LOCATIONS OF INTEREST REPORT/5% PROJECT IDENTIFICATION

Is this project location identified in one of the two most recent LOIR/5% Reports? YES ☐ NO ☐

Contact Information and Signature

6. PRIMARY CONTACT PERSON or AGENCY		
NAME	TITLE	
ADDRESS	TELEPHONE ( )	
MUNICIPALITY	STATE	ZIP
7. SIGNATURE OF LOCAL APPROVING AUTHORITY	DATE	

WisDOT Information – Shaded areas to be completed by WisDOT staff only.

A. Environmental Documentation Type	B. Hazard Elimination Type
C. Functional Class	D. PEF

REGION APPROVAL Project Supervisor Planning Supervisor	Date Date

C.O. Concurrence Approving Authority	Approved ___ Disapproved ___ Date

Revised 4.29.2014

Application Requirements

1. Completed HSIP Project Application form

2. General sketch of project proposal

3. Site photos

4. Crash history (most current consecutive 5 yrs.); provide DTSD Region Office with MV4000 reports

5. Collision diagram (example included in the instructions)

6. For proposed changes in intersection traffic control or intersection reconstruction – a Scoping Level Intersection Control Evaluation (ICE) is required – this includes operational and warrant analysis

7. Local Roads and Connecting Highways may not be mixed on the same application – separate applications

Project Funding Caps

CAP BASICS

- For all NEW projects over $200,000
- For all EXISTING projects that escalate to over $200,000
- State Projects - overages charged to Region's allocation
- Local Projects - overages charged to Locals
- Any funding cap increases must be approved by the Statewide HSIP coordinator

THE BENEFITS

- Foster better project scoping
- Promote accurate cost estimates
- Help control cost increases on large projects

≥ $200,000

Project Size Limits

THE SIZE LIMITS

- **Projects over $1,700,000 trigger a co-pay requirement**

• First $1,700,000	→	HSIP Program Funds (90% Federal)
• Second $1,700,000	→	Non-HSIP Funds
• Balance of Project	→	Costs shared equally between HSIP and non-HSIP funding sources

THE BENEFITS

- **Insures better geographic distribution of projects**
- **Improves ability of locals to compete for projects**

Sunset Provision

THE PROVISION

- **Annual Region review in January ensures existing project viability**
- **A project will lose its status IF:**
  - There is no design action within 2 years[1] of program approval, OR,
  - It is not let to contract within 3 years[1] of program approval (4 years[1] if right-of way is needed)
- **Local officials informed by letter of impending action before project is deleted**

THE BENEFITS

- **Insures projects remain viable**
- **Avoids reserving program dollars for non-viable projects**
- **Enables flexibility to the Program to replace non-viable projects**

[1] One year can be added to these timeframes for projects approved in Year 5 and two years added for projects approved in Year 6.

Tips for Successful HSIP Application

- Follow general instructions on HSIP application
- Projects propose specific mitigation treatments that are known to reduce documented crash trends
- Be as specific as possible in “Proposed Improvements” box
- Be realistic with the outlined SFY timeframe
  - Generally, design, R/E, and construction not scheduled in same FY

HSIP Coordinators

Central Office

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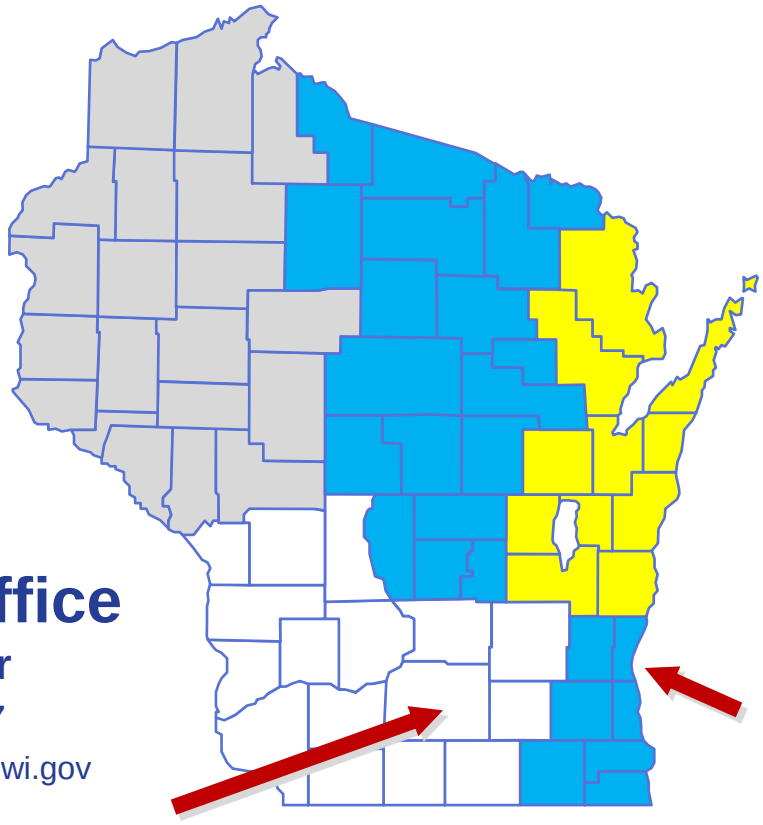

Send applications to:

Southeast

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Roslin Burns

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For More Information

- Consult the HSIP website under WisDOT's Programs for Local Gov't

- http://www.dot.wisconsin.gov/localgov/

- The HSIP Application Form in *Word* format is also available at this site

High Risk Rural Roads

- Statewide data analysis
- County rural major & minor collectors
- Minimum crash density and crash rate
- ≥ 3 miles, ≥ 5 crashes
- Ranked by 5 year KA rate

- 10 corridors are selected each year for further investigation

Corridor Safety Evaluation (CSE)

- Performed by consultant at no local cost or obligation
- Crash statistics and map
- Field review – local officials welcome to participate
- Generate list of eligible recommended safety treatments with locations for corridor
- Provide cost estimates for design and construction (Real estate costs are not eligible)
- No other engineering work required for application

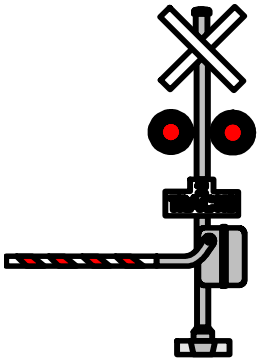
HRRR: Typical Eligible Treatments

- Removal of obstacles for adequate clear zone
- Chevrons/Night arrows/Post-mounted delineation
- Guide signs and/or advanced warning signs
- Enhanced edgeline and/or centerline pavement markings
- Shoulder rumble strips/Centerline rumble stripes
- Add guardrail or replace substandard guardrail end treatments
- High Friction Surface Treatments
- Note: Intersection upgrades are not eligible

Larger projects welcome in traditional HSIP program as supported by data.

HSIP Rail Warning Devices Program

TYPICAL ELIGIBLE PROJECTS

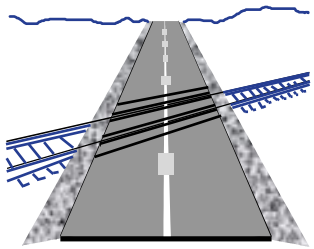


- Flashing lights
- Cantilevered flashing lights
- Crossing gates
- Enhanced flashing lights & gates
- Increasing lamp size
- Circuitry adjustments/improvements

HSIP Rail Crossing Elimination of Hazards

TYPICAL ELIGIBLE PROJECTS

- Geometric improvements (grades and horizontal alignments)
- Modular crossings
- Grade separations
- Crossing consolidations
- Crossing closures
- Incentive payments to encourage closures



Railroad Coordinators

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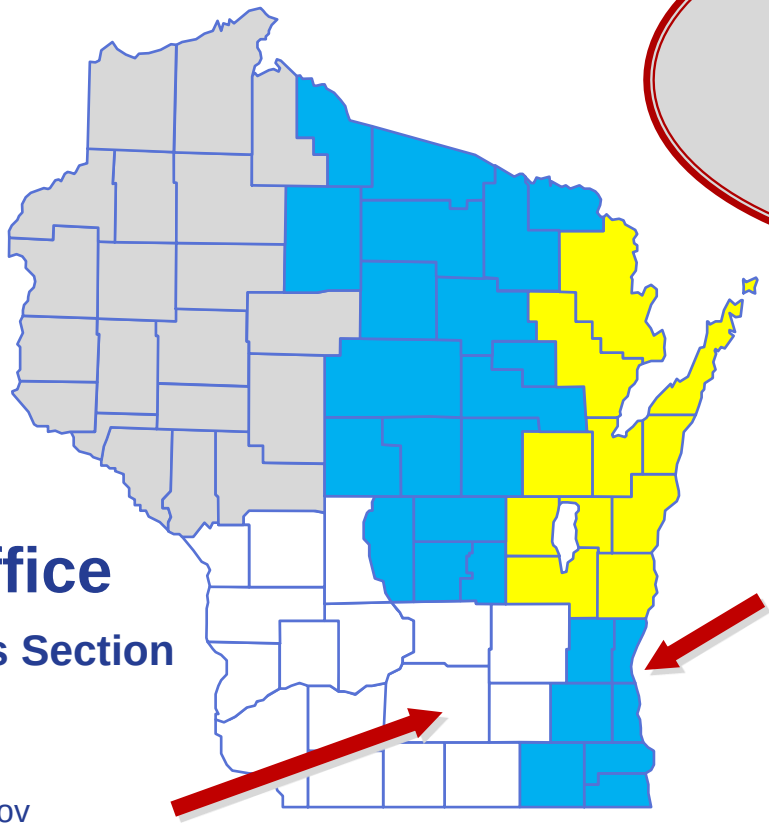

Central Office

Rails and Harbors Section

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HSIP Resources and Contacts

- **WisDOT HSIP website:**
  http://www.dot.wisconsin.gov/localgov/highways/hsip.htm

- **Southeast Region – Safety Engineer**
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